Resfab

# Start Up & Troubleshooting Manual

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# Yogurt Blender Service Manual

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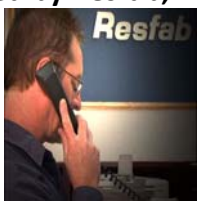
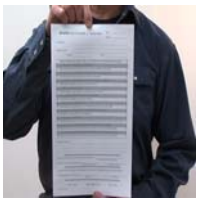
# Resfab : Yogurt Blender Service Manual : START UP & REPAIR

**You should schedule the start up with the information provided by Resfab; which includes your contact person, location, and phone number, before going to the site.** 


**Before starting the installation of the blender make sure you have one Resfab check list form for each machine and that the "Contact Person" is there to sign the check list after the start up is done.**

**Fill out the top of the check lists, completing all information about the store. DO NOT forget to write the serial numbers of the blenders you are installing on the check lists.** 

**START UP:**

| | | |
|---|---|---|
| 1 | | Make sure the entire protective plastic shield is removed from entire blender body |
| 2 | | Make sure the 4 legs are screwed tightly onto the blender base and use a level to level the blender |

| | | |
|---|---|---|
| 3 | | Make sure blender is turned off and unplugged from the outlet. |
| 4 | | Remove the tray. |
| 5 | | Remove the front panel, the mobile guard pins and mobile guards, the top and lower shield, the top cover and unscrew the cabinet and remove it. |
| 6 | | Screw (turning counter clockwise) the extrusion matrix onto the cone to make sure that it screws freely |

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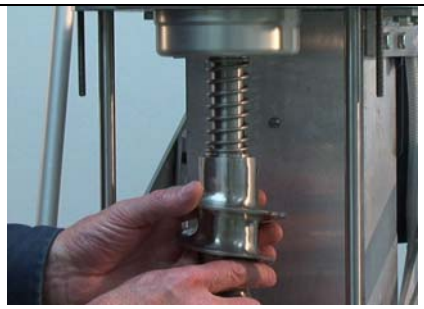
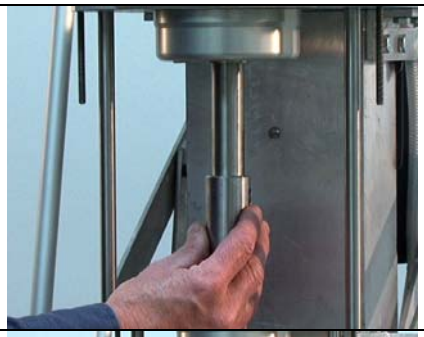
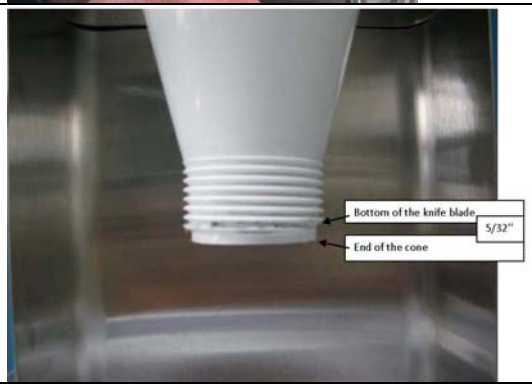
| 7 |  | Remove the auger, transmission bushing, and master spring from the blender. |
| 8 |  | Check that the transmission bushing slides freely, but without being too loose, onto the master shaft. |
| 9 | | Put the transmission bushing pin in place and make sure it fits tight but easy to install. |
| 10 | | Check that the auger slides freely, but without being too loose, onto the transmission bushing. Put the auger pin in place and make sure it fits tightly but easy to insert. |
| 11 |  | Check the knife adjustment. The bottom of the knife blade should be at 5⁄32'' from the bottom of the cone edge. |

| | | |
|---|---|---|
| 12 | | Check that the belt is well adjusted **and not too tight.** |
| 13 | | Check that the elevator will move up and down without any resistance. |
| 14 | | Check visually the aluminum base to make sure there are no cracks. |
| 16 | | Check the stainless steel lever on each side and make sure there are no loose bolts, screws or nuts. |

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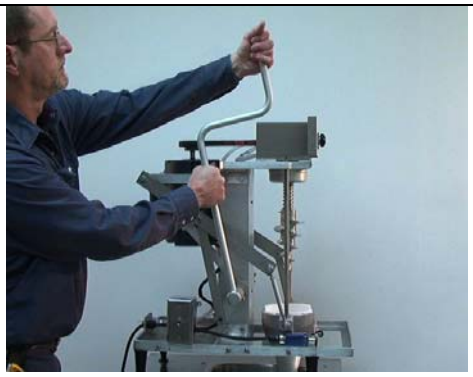
| 17 | |  Check if the arm is screwed tightly and does not move inside the arm holder. |
| 18 | | Put back the lower shield, the top shield, the mobile guard and the tray. |
| 19 | | Plug blender into the outlet and turn unit on. |

| | | |
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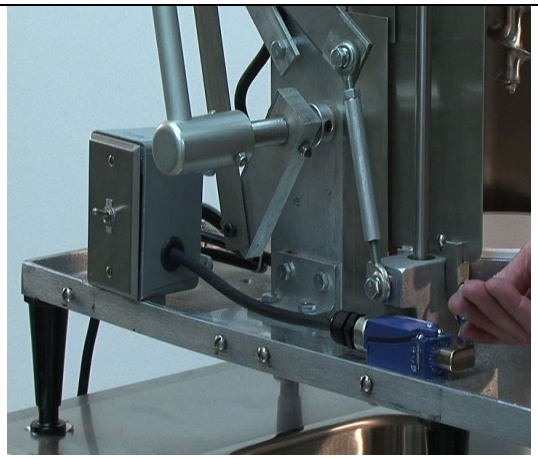
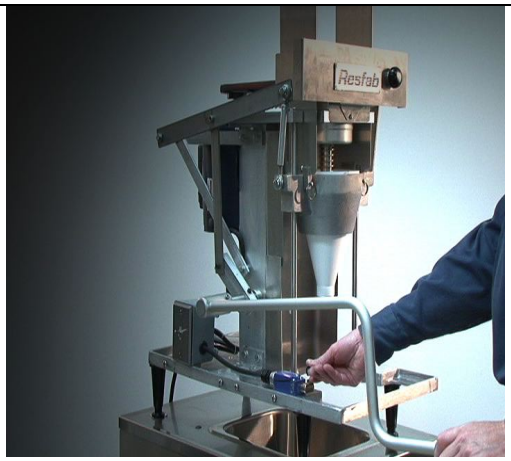
| 20 |  |  Bypass the safety switch and lower the arm to check if the auger turns without unusual noise and without vibration. |
| 21 | | With the rinse cylinder on the cone, lower the arm and press the rinse button. Make sure there are no leaks on the water valve. **Check that the rise double water jet works properly.** |
| 22 | | Put the cone in the elevator and lower the arm to make sure the auger does not scratch the inside of the cone. |

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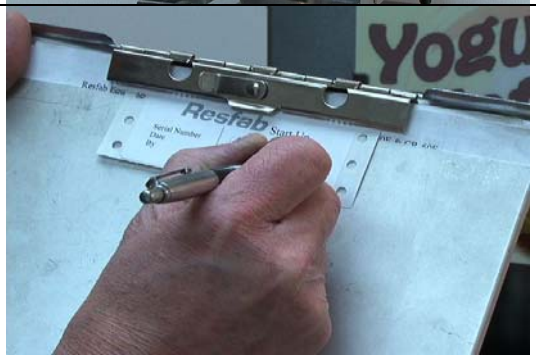
|---|---|---|
| 23 | | Reassemble the unit and check for sharp edges and that the parts are free of damage. |
| 24 |  | Write the date, serial numbers **and your initials** on the small start up sticker provided with the form and **stick it** on the inside end of the top panel. When you have a service call, this sticker will help you to know if the blender is still under warranty. |
| 25 | | Place your company service sticker, with name and number, on the side of the blender casing. |

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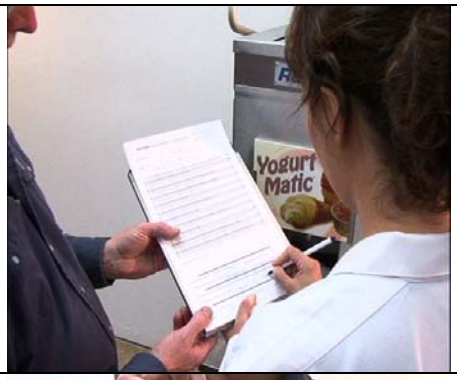
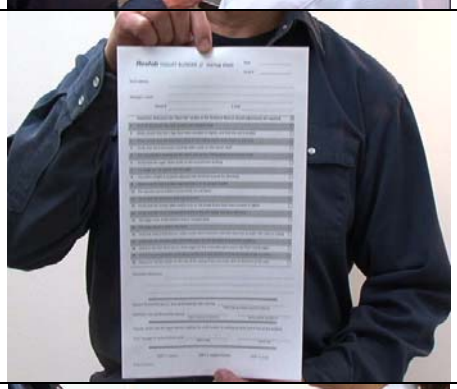
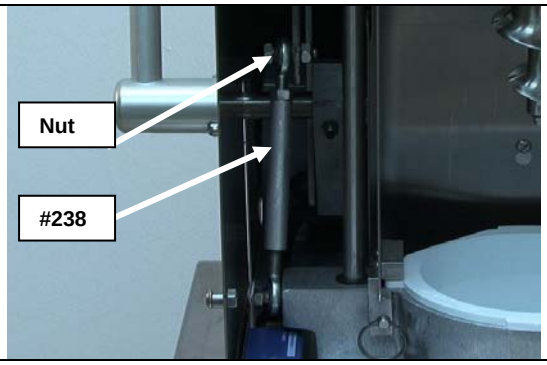
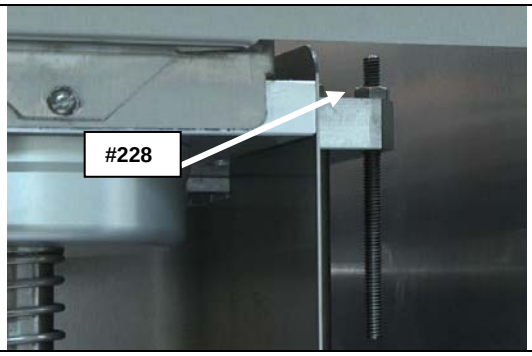
|---|---|---|
| 26 | | Note, on the check list, any adjustments or repairs you have made on the blender during the start up. |
| 27 |  | Have the check list signed by the "Contact Person" at the store. |
| 28 |  | Sign the check list. |
| 29 | | Leave the store copy with the "Contact Person" and bring the other two copies to your office. |

| | | |
|---|---|---|
| 30 | | Fax or e-mail the factory copy to the factory and mail the original, keeping the copy for your records.<br><br>FAX: 352-728-1904<br>EMAIL: lindabarwick@resfab.com<br><br>Mail the invoice for the Start Up, along with the original Post Verification Inspection Start Up form to:<br>Resfab Equipment<br>8645 Treasure Island Road<br>Leesburg, FL 34788 |

TROUBLE SHOOTING:

| | |
|---|---|
| **#1:** | **Elevator Alignment:** |
| 1 | **If there is resistance when operating the arm, the aluminum elevator may be out of alignment on the shafts.** |
| 2 | Before performing any cleaning or service, always turn the machine off and unplug the unit from the wall outlet. |
| 3 | Remove the front cover. |
| 4 |  This is easily corrected by readjusting the turnbuckle at the front, left side of the blender. Part #238 |
| 5 | Remove the mobile guard. Loosen the top nut over the aluminum shaft. |
| 6 | Readjust turnbuckle by turning it left or right, until aluminum elevator slides smoothly up and down the shafts. |
| 7 | Retighten turnbuckle nuts. |
| 8 | Check alignment by raising and lowering the arm. Elevator should slide smoothly up and down the shafts. |
| 9 | Reinstall mobile guards and front cover. |
| 10 | Plug unit back into outlet. |
| 11 | Alignment is complete and blender is ready for operation. |
| | |
| **#2:** | **Elevator Height Adjustment:** |
| 1 | **If the blender begins to make a noise; or if the cone begins to develop grooves; or if the knife begins to wear; or the product is stuck in the matrix: The elevator stop pins need to be adjusted.** |
| 2 | Before performing any cleaning or service, always turn the machine off and unplug the unit from the wall outlet. |
| 3 | Remove the front cover. |
| 4 |  Two stop pins are located on each side of the top front, near the mobile guards. Part #228 Adjustment Screw. |
| 5 | Pull arm down to raise cone and check the clearance between the cone and the bottom of the |

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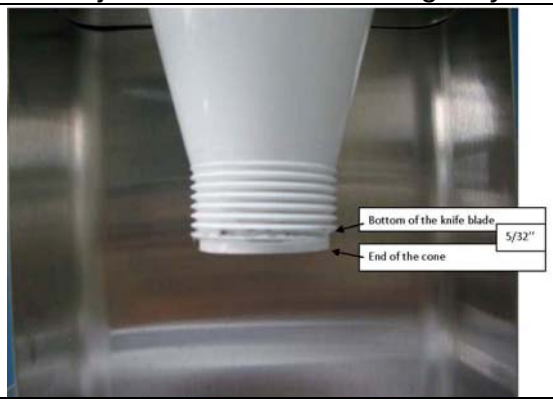
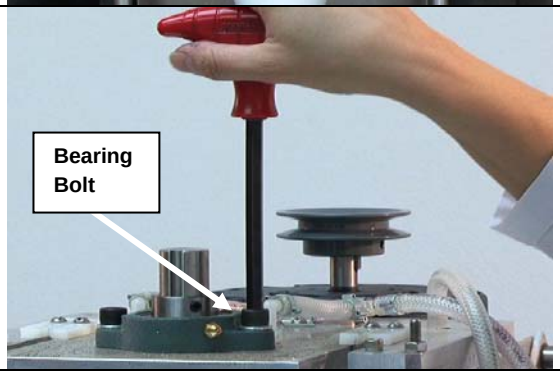
| | knife. | |
| 6 | If readjustment is needed, begin by loosening the stop pin nuts #228 on both sides. | |
| 7 |  | Adjust both side pins until there is a 5/32" clearance between the bottom of the cone rim and the bottom of the knife. |
| 8 | Retighten stop pin nuts #228 and recheck the clearance. | |
| 9 | Reinstall front cover and top of unit. | |
| 10 | Plug unit back into outlet. | |
| 11 | Adjustment is complete and the blender is ready for operation. | |
| | | |
| **All of the following different repairs have to be done with the front panel, mobile guard, top panel, and casing removed to be able to work on the part that needs to be repaired.<br>If the blender begins to make noise and the cone becomes grooved, the drive shaft maybe out of alignment.** | | |
| | | |
| **#3: Drive Shaft Alignment:** | | |
| 1 | Before performing any cleaning or service, always turn the machine off and unplug the unit from the wall outlet. | |
| 2 | Begin by removing the auger (Part #111) With one hand supporting the auger, remove the auger pin. (Part #110) | |
| 3 | Utilizing the auger pin, push the bushing pin (Part #106) out of the transmission bushing (Part #107); slide the transmission bushing off of the master shaft (Part #103) along with the master spring (Part #105). | |
| 4 | | Place auger and transmission bushing in the center of the cone. |

| | | |
|---|---|---|
| 5 | | With the auger and transmission bushing in the cone; pull the arm down slowly and check to see if the main drive shaft slides into the auger. If the shaft does not slide into the auger, it is out of alignment. NOTE WHICH SIDE OF THE AUGER THE SHAFT IS TOUCHING. |
| 6 |  | First remove the belt, (Part #229) then remove the pulley, (Part #102). Loosen both the bearing bolts just enough to allow adjustment. |
| 7 | Looking into cone, check the alignment of the shaft and adjust by tapping the shaft gently. | |
| 8 | Slowly lower the arm down to recheck the alignment. Shaft should slide smoothly into the auger throughout the entire arm stroke. | |
| 9 | When alignment is complete, retighten the baring bolts. | |
| 10 | After tightening the bolts, make one final alignment check by lowering the arm slowly. | |
| 11 | Place the large spring onto the main drive shaft and reinstall the transmission bushing, placing the bushing pin in the bottom hole. Slide the auger onto the transmission bushing and insert auger pin into opening to lock auger in place. | |
| 12 | Reinstall the pulley and put the belt back on. | |
| 13 | Plug unit back into outlet. | |
| 14 | Alignment is complete and blender is ready for operation. | |
| | | |
| **#4:** | **Auger Vibrating:** | |
| 1 | **If blender begins to make a noise, or the auger is shaking, the belt is too tight and needs to be adjusted.** | |
| 2 | Before performing any cleaning or service, always turn the machine off and unplug the unit from the wall outlet. | |
| 3 | The belt is adjusted by adjusting the 4 bolts from the motor to the main channel. | |

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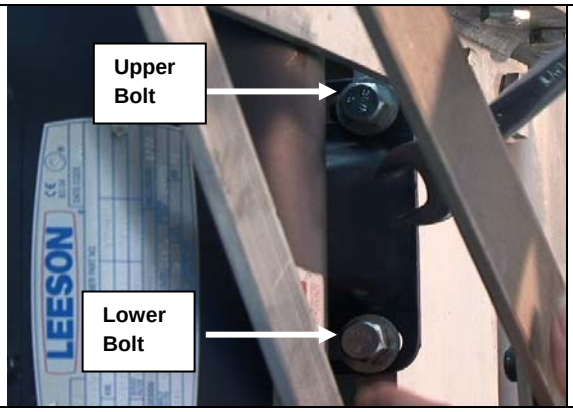
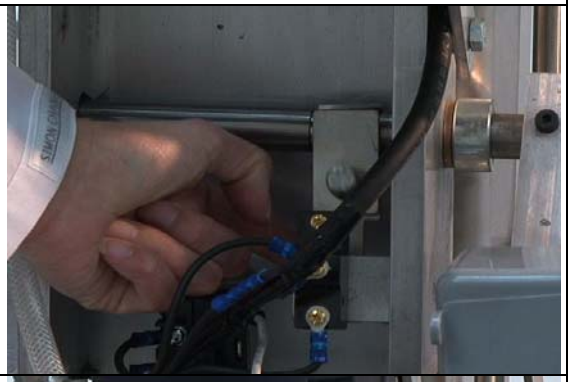
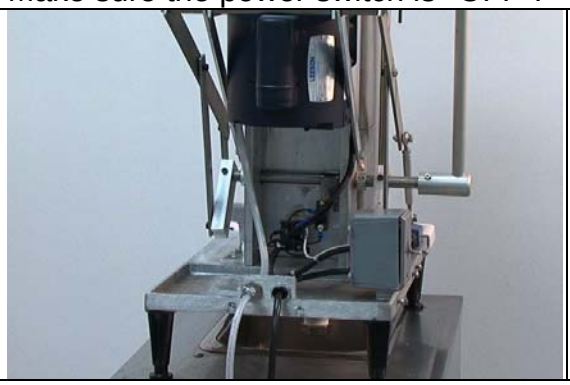
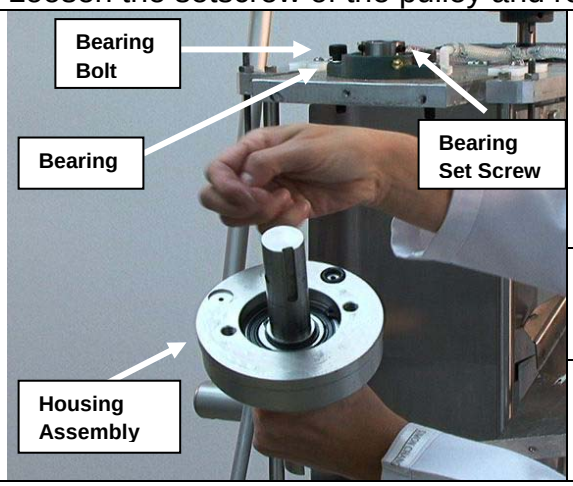
| 4 |  | Use a ½" wrench to untighten the lower bolts from the motor to the main channel. If you need to loosen the belt more, tighten the upper bolts slightly. |
| 5 | Plug unit back into outlet. | |
| 6 | Alignment is complete and blender is ready for operation. | |
| | | |
| **#5:** | **Auger not engaging:** | |
| 1 | **If the machine does not start when lowering the arm: The back flapper (Part #250) is to loose and cannot activate the micro switch.** | |
| 2 | Remove the front panel, top and cabinet. | |
| 3 | | Make sure the power switch is on. |
| 4 |  | Using your finger move the back flapper and check if it is loose. |
| | | If it is loose, use a 9/16" wrench and tighten the bolt of the flapper. You should tighten with approximately 45 pound of torque. |
| 5 | Replace cabinet, top and front panel. | |
| 6 | Plug unit back into outlet. | |
| 7 | Service is complete and blender is ready for operation. | |
| | | |
| **#6:** | **Auger does not disengage:** | |
| 1 | **If the auger does not stop turning, that means the micro switch (Part #241) is defective and needs to be replaced.** | |

| | | |
|---|---|---|
| 2 | Remove the front panel, top and cabinet. | |
| 3 | Make sure the power switch is "OFF". | |
| 4 |  | First, with a screwdriver you will unscrew the 2 wires on the micro switch and remove them from the micro switch. Then use a 9/16" wrench to remove the flat nut at the back of the micro switch. Remove the defective micro switch. Take the new micro switch and screw it back in place and screw the electric wire back into the switch. |
| 5 | Replace cabinet, top and front panel. | |
| 6 | Plug unit back into outlet. | |
| 7 | Service is complete and blender is ready for operation. | |
| | | |
| **#7:** | **Grinding Noise from Aluminum Housing:** | |
| 1 | **If a grinding noise is coming from the aluminum housing over the auger, the bearing is worn and the housing assembly glides need to be replaced.** | |
| 2 | Before performing any cleaning or service, always turn the machine off and unplug the unit from the wall outlet. | |
| 3 | Remove the front, top, cabinet cover, front plate and the belt guard. | |
| 4 | Remove the auger (Part #111), transmission bushing (Part #107) and the waster spring (Part #105). | |
| 5 | Remove the belt (Part #229) to free the pulley | |
| 6 | Loosen the setscrew of the pulley and remove the pulley (Part#102). | |
| 7 |  | Loosen the 2 setscrews on the bearing (Part #104) and finally, by using a 5/16” allen key, unscrew the 2 bolts on each side of the flange bearing (Part #104) until the housing is free. You may need a rubber hammer to hit the top of the master shaft if the housing is stuck on the top plate. |
| 8 | | Remove the housing; remove the 2 o’rings on the flat side of the housing. |
| 9 | | Place the two o’rings on the new housing. |
| 10 | Slide the new housing shaft in the top plate hole, then with the allen key screw back the 2 bolts. | |

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| 11 | | Before tightening the bolts, align the shaft with the auger and transmission bushing in the cone. Screw the bolts very tightly and screw the 2 setscrews. |
| 12 | Put the pulley back into place and tighten the pulley setscrews. | |
| 13 | Put the belt back on. | |
| 14 | Replace cabinet, top and front panel. | |
| 15 | Plug unit back into outlet. | |
| 16 | Service is complete and blender is ready for operation. | |
| | | |
| **#8:** | **Rinse water valve is leaking.** | |
| 1 | **If the rinse water valve is leaking…** | |
| 2 | Before performing any cleaning or service, always turn the machine off and unplug the unit from the wall outlet. | |
| 3 | Remove the plastic hose from the back nylon fitting (Part #312). You may need a screwdriver to unscrew the collar or a cutter if the factory secured the tube and the fitting with an oeteker clamp. | |
| 4 | Using an 11/16" wrench, remove the nylon fitting (Part #312). | |
| 5 | With a screw driver or a knife, remove the silver cap on the valve button (Part #301). | |
| 6 | | Use two screw drivers, one in the front screw and one in the back inside screw of the valve and unscrew until the valve piston (Part #309) can be removed. |

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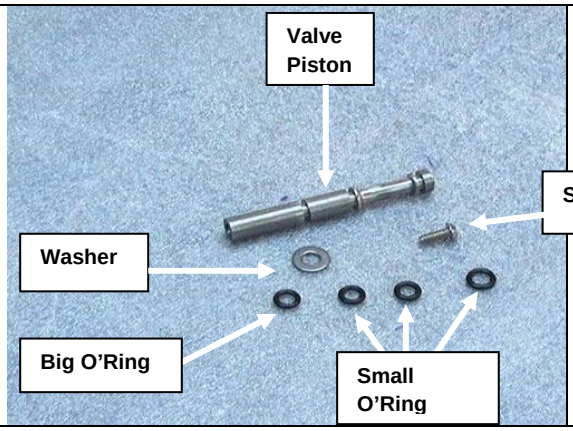
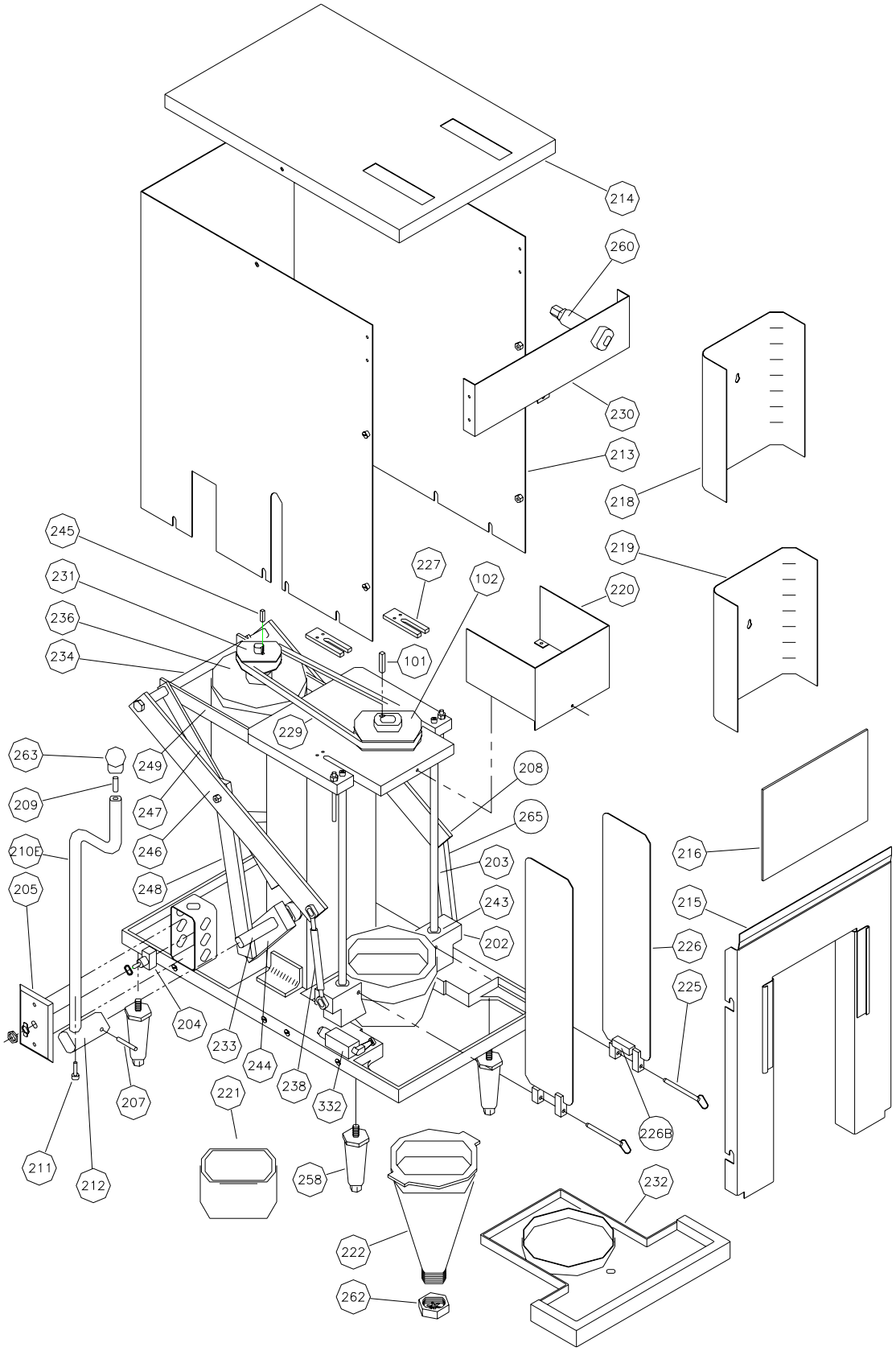
| 7 |  | Change the 4 o'rings on the valve piston. The big o'ring needs to be slightly tight between the washer and the end of the piston. |
| 8 | Slide the spring on the valve piston and re-insert the valve piston in the valve body. Using the two screw drivers to screw the piston in place. | |
| 9 | Screw back the nylon fitting. | |
| 10 | Re-connect the plastic tubing. | |
| 11 | Re-install the silver cap in the valve button. | |
| 12 | Plug unit back into outlet. | |
| 13 | Service is complete and blender is ready for operation. | |
| | | |
| **#9: End Product Issues:** | | |
| | 1- If the product is coming out like whipped cream it's because the product is too soft or too hard.<br>2- If the product comes out like a round tube it's because the product is too hard. The optimal product temperature is minus 5° F or minus 17° C. That is the product temperature not the freezer ambient temperature. Check regularly and with a sanitized probe. Check the internal temperature of the product in the freezer. | |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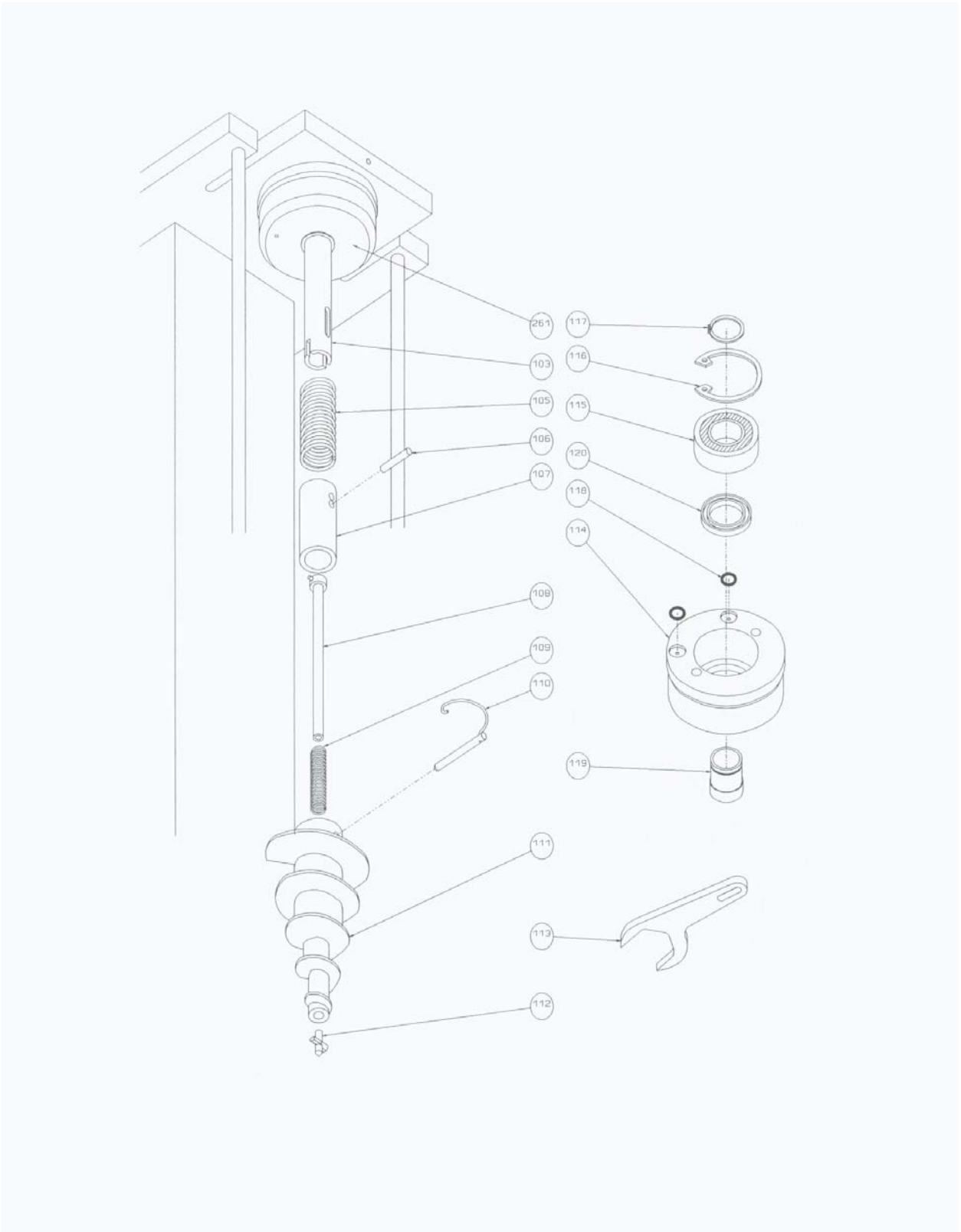
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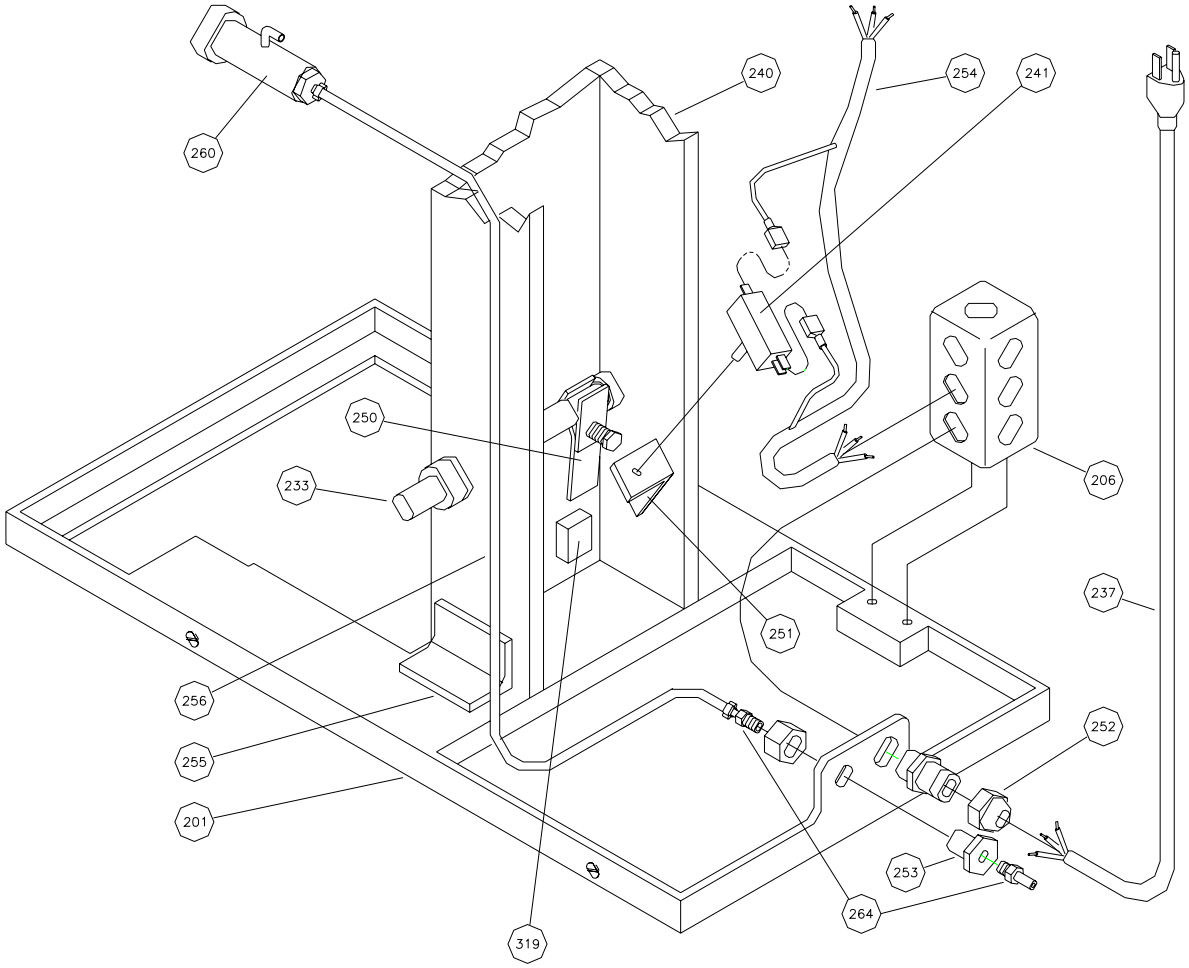
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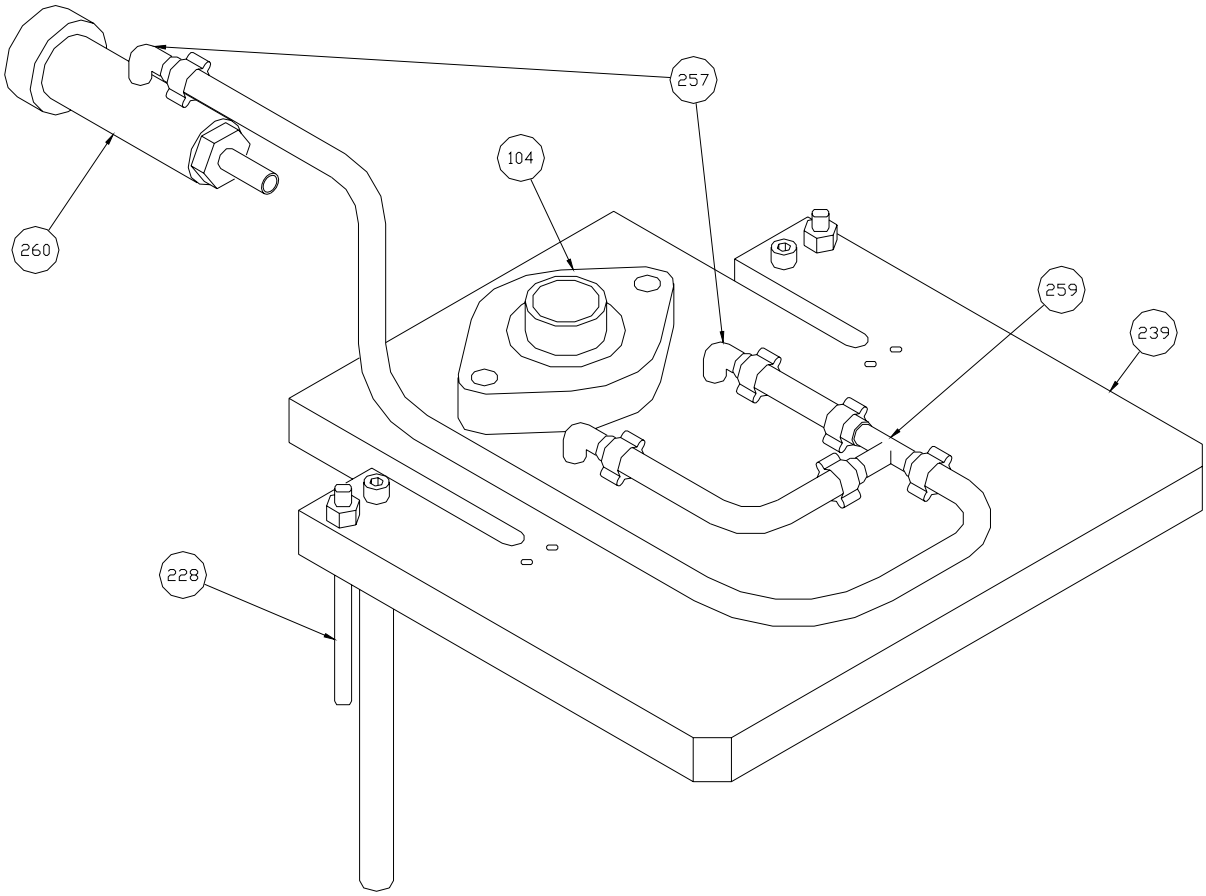
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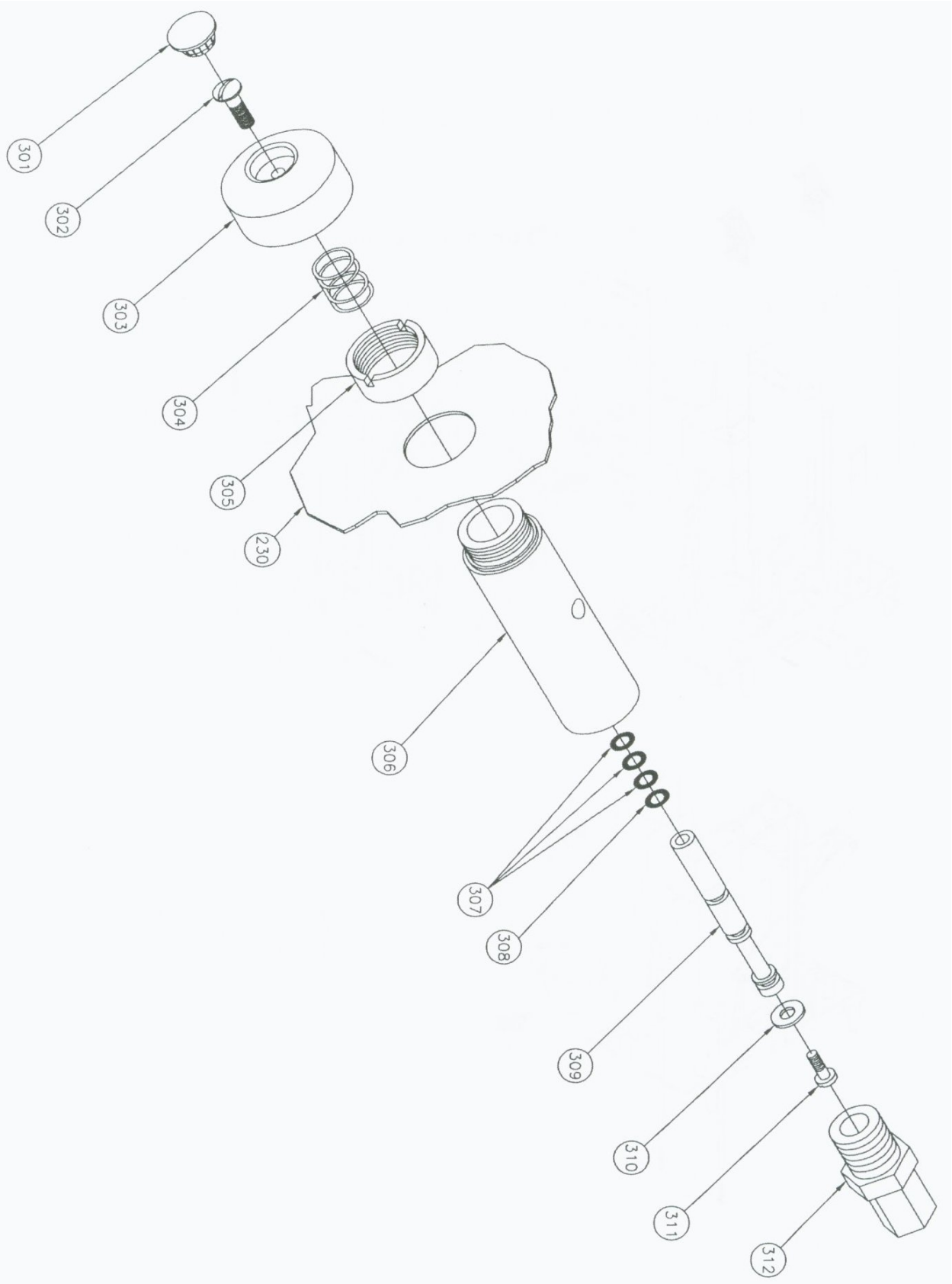
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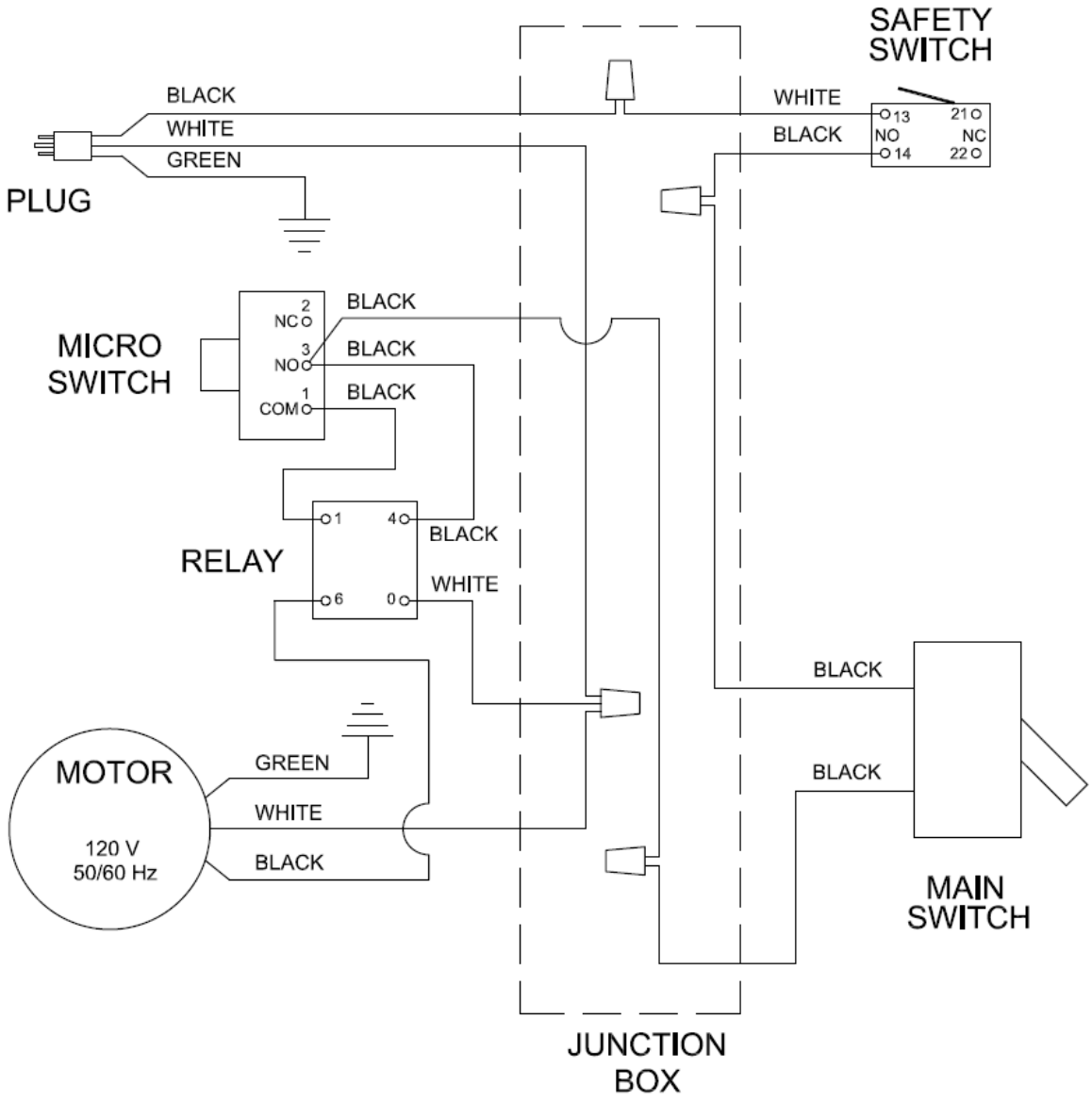
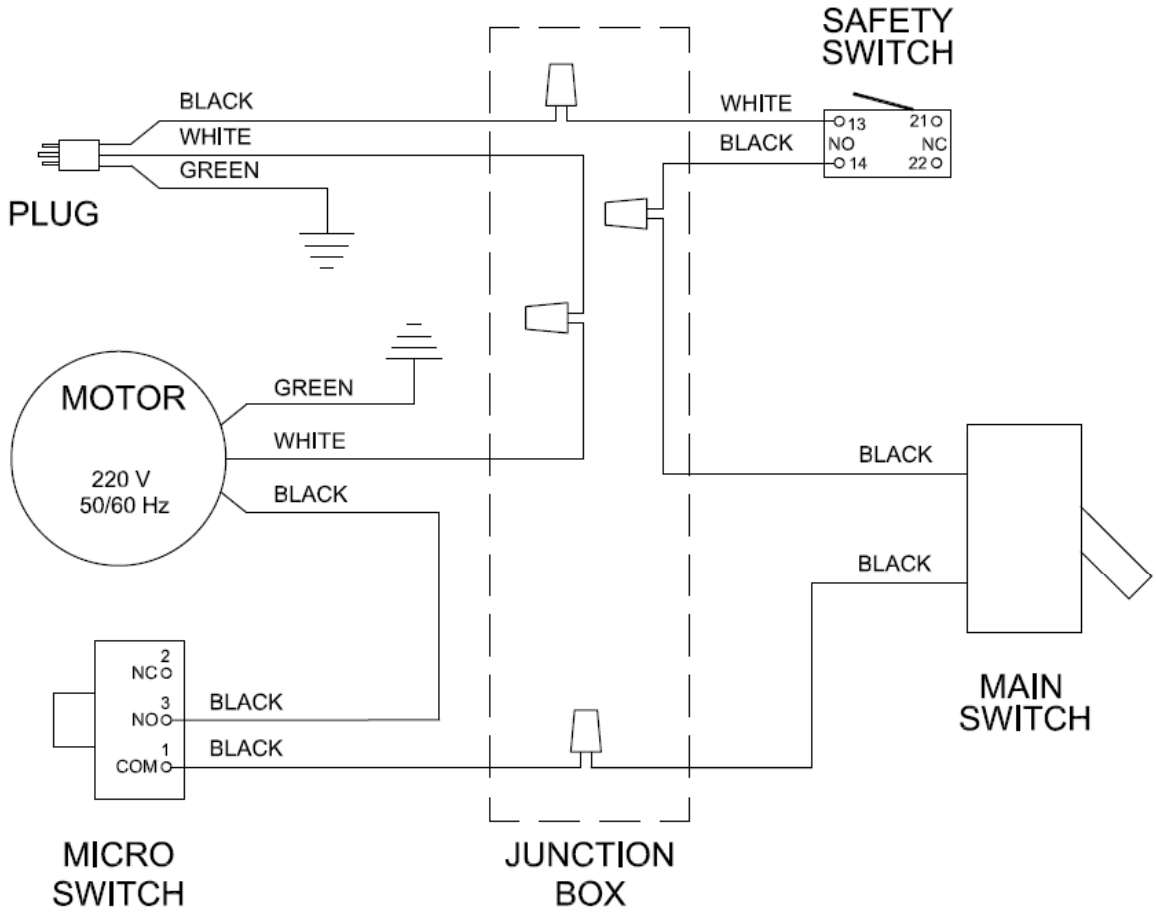
# ELECTRIC DIAGRAM
## 120 V, 50/60 Hz



# ELECTRIC DIAGRAM
## 220 V, 50/60 Hz



# PART LIST

| No. | Part No. | Description | Qty. |
|---|---|---|---|
| 101 | R4-14-101 | Driven pulley key | 1 |
| 102 | R4-14-102 | Driven pulley | 1 |
| 103 | R4-14-103 | Master shaft | 1 |
| 104 | R4-14-104 | Flange pillow block | 1 |
| 105 | R4-14-105 | Master spring | 1 |
| 106 | R4-14-106 | Bushing pin | 1 |
| 107 | R4-14-107 | Transmission bushing | 1 |
| 108 | R4-14-108 | Knife holder stem | 1 |
| 109 | R4-14-109 | Knife spring | 1 |
| 110 | R4-14-110 | Auger pin | 1 |
| 111 | R4-14-111 | Auger | 1 |
| 112 | R4-14-112 | Knife | 1 |
| 113 | R4-14-113 | Dismounting tool | 1 |
| 114 | R4-14-114 | Bearing housing | 1 |
| 115 | R4-14-115 | Ball bearing | 1 |
| 116 | R4-14-116 | Great snap ring | 1 |
| 117 | R4-14-117 | Small snap ring | 1 |
| 118 | R4-14-118 | O-ring | 2 |
| 119 | R4-14-119 | Spacer bushing | 1 |
| 120 | R4-41-120 | Rubber seal | 1 |
| 201 | R4-14-201 | Base | 1 |
| 202 | R4-14-202 | Elevator | 1 |
| 203 | R4-14-203A | Vertical guides for R4-14-243 | 1 |
| 204 | R4-14-204 | Main power switch | 1 |
| 205 | R4-14-205 | Power switch plate | 1 |
| 206 | R4-14-206 | Junction box | 1 |
| 207 | R4-14-207 | Spring pins | 1 |
| 208 | R4-14-208 | Opposite major lever | 1 |
| 209 | R4-14-209 | Hub pressure screw | 1 |
| 210 | R4-14-210E | Lever ergonomic | 1 |
| 211 | R4-14-211 | Lever pressure screw | 1 |
| 212 | R4-14-212 | Lever holder | 1 |
| 213 | R4-14-213 | Casing | 1 |
| 214 | R4-14-214 | Cover | 1 |
| 215 | R4-14-215 | Front panel | 1 |
| 216 | R4-14-216 | Acrylic plate | 1 |
| 217 | R4-14-217 | Electric rinse button | 1 |

| No. | Part No. | Description | Qty. |
|---|---|---|---|
| 218 | R4-14-218 | Top shield | 1 |
| 219 | R4-14-219 | Lower shield | 1 |
| 220 | R4-14-220 | Belt guard | 1 |
| 221 | R4-14-221 | Rinse cylinder | 1 |
| 222 | R4-14-222 | Cone | 1 |
| 225 | R4-14-225 | Mobile guard pin | 2 |
| 226 | R4-14-226 | Mobile guard | 2 |
| 227 | R4-14-227 | Mobile guard guide | 2 |
| 228 | R4-14-228 | Adjustment screw | 2 |
| 229 | R4-14-229 | Belt | 1 |
| 230 | R4-14-230 | Top front plate | 1 |
| 231 | R4-14-231 | Driver pulley | 1 |
| 232 | R4-14-232 | Tray « Deep collar » | 1 |
| 232 | R4-14—232S | Tray « Sliding matrix » | |
| 233 | R4-14-233 | Main pivot | 1 |
| 234 | R4-14-234 | Secondary pivot | 1 |
| 235 | R4-14-235 | Electric water valve | 1 |
| 236 | R4-14-236 | Motor (110,220 v – 50-60 Hz) | 1 |
| 237 | R4-14-237 | Power cord | 1 |
| 238 | R4-14-238 | Turnbuckle | 1 |
| 239 | R4-14-239 | Top plate | 1 |
| 240 | R4-14-240 | Main column | 1 |
| 241 | R4-14-241 | Micro-swtich | 1 |
| 243 | R4-14-243 | Linear bearing (teflon) / R4-14-203A | 3 |
| 244 | R4-14-244 | Vertical lever support | 2 |
| 245 | R4-14-245 | Driver pulley key | 1 |
| 246 | R4-14-246 | Major lever | 1 |
| 247 | R4-14-247 | Angular brace | 2 |
| 248 | R4-14-248 | Vertical lever | 2 |
| 249 | R4-14-249 | Horizontal brace | 2 |
| 250 | R4-14-250 | Sliding lever | 1 |
| 251 | R4-14-251 | Micro-switch support | 1 |
| 252 | R4-14-252 | Bulkhead connector | 1 |
| 253 | R4-14-253 | Fitting and nut | 1 |
| 254 | R4-14-254 | Switch wire | 1 |
| 255 | R4-14-255 | Stiffening angle | 4 |
| 256 | R4-14-256 | Nylon tube | 2 m. |
| 257 | R4-14-257 | Nylon elbow | 3 |
| 258 | R4-14-258 | Adjustable leg | 4 |
| 259 | R4-14-259 | Nylon « T » | 1 |
| 260 | R4-14-260 | Assembled valve | 1 |

| No. | Part No. | Description | Qty. |
|---|---|---|---|
| 261 | R4-14-261 | Assembled bearing housing | 1 |
| 262 | R4-14-262 | Matrix nut | 1 |
| | R4-14—262G | Matrix with slide Ass'y | 1 |
| 263 | R4-14-263 | Knob | 1 |
| 264 | R4-14-264 | Nylon fitting | 2 |
| 301 | R4-14-301 | Front plug | 1 |
| 302 | R4-14-302 | Front screw | 1 |
| 303 | R4-14-303 | Push button | 1 |
| 304 | R4-14-304 | Return spring | 1 |
| 305 | R4-14-305 | Cylindrical nut | 1 |
| 306 | R4-14-306 | Valve husing | 1 |
| 307 | R4-14-307 | Small O-ring | 3 |
| 308 | R4-14-308 | Great O-ring | 1 |
| 309 | R4-14-309 | Valve piston | 1 |
| 310 | R4-14-310 | Stop washer | 1 |
| 311 | R4-14-311 | Rear screw | 1 |
| 312 | R4-14-312 | Nylon fitting | 1 |
| 319 | R4-14-319 | Relay (model 920 only) | 1 |
| 320 | R4-14-320 | O-ring for Sliding Matrix | 2 |
| 321 | R4-14-321 | Red blocking screw for Sliding Matrix | 1 |
| 332 | R4-14-332 | Safety switch | 1 |